REMARKS

This paper is responsive to the Office Action dated November 16, 2005. Claims 1-8 and 33-48 were examined. Claims 1 – 8 and 33 – 48 were rejected. Applicant has amended claims 1 – 8. Claim 1 has been amended to clarify the claim. Claims 2 – 8 have been amended to avoid antecedent basis errors resulting from amendment of claim 1.

Rejections under 35 U.S.C. §112, second paragraph

The Examiner has rejected claim 4 under 35 U.S.C. §112, second paragraph as being indefinite. Applicant respectfully traverses the rejection. The Examiner contends that claim 4 is indefinite because there is no disclosure as to what data is being passed, or when and why it is being passed. The data being passed is "fault to target translation data." Applicant respectfully submits that §112, second paragraph does not require Applicant to unnecessarily narrow a claim to aid the Examiner to understand when and why. Applicant respectfully refers the Examiner to Figure 4 to assist the Examiner. Applicant requests that the rejection of claim 4 be withdrawn since claim 4 is definite.

Rejections under 35 U.S.C. §103

The Office has rejected claims 1 – 8 and 33 – 48 under 35 U.S.C. §103 as being unpatentable over "Optimizing Away C++ Exception Handling" by Schilling (Schilling)in view of "Effective Null Pointer Check Elimination Utilizing Hardware Trap" by Kawahito, et al. (Kawahito), and further in view of U.S. Patent No. 6,189,141 naming as inventors Benitez, et al. (Benitez). Applicant traverses all of the rejections at least because the Examiner has failed

    1) to establish prima facie case of obviousness; and

    2) to show evidence of motivation or suggestion to combine and modify the references as done by the Examiner.

1) Failure to show each and every limitation

The Examiner has not shown that the references together disclose or suggest

"selectively eliminating from code null pointer condition checks that encounter null pointer conditions less frequently than a given threshold according to profile feedback for the code" as recited in claim 33, and similarly recited

- 6 -

Application No.: 10/044,731

in claims 41 and 44. None of the references disclose or suggest "eliminating the null pointer condition check, if the null pointer condition check infrequently encounters null pointer conditions" as recited in amended claim 1. Neither Schilling nor Benitez disclose eliminating null pointer condition checks. **Kawahito discloses eliminating null pointer condition checks that are redundant, and fails to disclose or suggest eliminating null pointer condition checks as recited in the claims.** *See* Kawahito p. 139, Abstract and paragraphs 4 – 5 in the second column.

2) Combination and modifications of references as performed by the Examiner lack motivation or suggestion

The Examiner has employed hindsight as guidance in modifying and combing the references. The Examiner quotes In re Keller to defend the combination and modifications. However, Applicant respectfully submits that In re Keller alone is at best an incomplete indication of the legal requirements for obviousness.

Legal Requirements for Obviousness

Obviousness "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). "[T]eachings of references can be combined *only* if there is some suggestion or incentive to do so." In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1599 – 1600 (Fed. Cir. 1988), *quoting* ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984) (emphasis in original).

"The case law makes clear that the best defense against the subtle but powerful attraction of hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." In re Dembiczak, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999). "[E]vidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature

- 7 -

response to 051116 foa   Application No.: 10/044,731

PAGE 10/13 * RCVD AT 1/16/2006 4:48:07 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:512 338 6301 * DURATION (mm-ss):04-20

of the problem to be solved." *Id.* **The showing of such evidence "must be clear and particular. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'"** *Id.* (emphasis added). "To imbue one of ordinary skill in the art with knowledge of the invention…, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983).

Lack of Suggestion or Motivation

a) Benitez

The Examiner states that frequent execution of one block inherently indicates that an alternative block is infrequently executed with the assistance of elementary algebra. Although Applicant will concede that algebra is within the grasp of one of ordinary skill in the art, Applicant respectfully submits that the Examiner's logic is too simple and that the assertion of inherency lacks support. The Examiner fails to appreciate that code that handles an exception likely handles null pointer conditions arising from multiple null pointer condition checks. Frequent execution of the handler does not necessarily indicate frequency of each of the null pointer condition checks encountering null pointer conditions. In addition, infrequent execution of exception handling code does not indicate whether one of multiple corresponding null pointer condition checks executed less frequently than a given threshold. "Inherency…may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." In re Robertson, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999), *quoting* Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). **The Examiner relies on a simplistic assumption, and fails to consider likely scenarios, as well as fails to establish support from the reference sufficient for an assertion of inherency.**

b) Kawahito

The Examiner never shows evidence of a motivation or suggestion to modify Kawahito as done in the Office Action. The Examiner characterizes Kawahito as disclosing elimination of null pointer condition checks, but disregards Kawahito's actual disclosure of eliminating

- 8 -

response to 051116 foa   Application No.: 10/044,731

PAGE 11/13 * RCVD AT 1/16/2006 4:48:07 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:512 338 6301 * DURATION (mm-ss):04-20
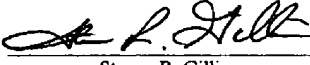
PATENT

redundant null pointer condition checks and null pointer condition checks that can be converted into hardware traps. *See* Kawahito p. 139, second column, 4th and 5th paragraphs. Without any evidence (with the exception of Applicant's disclosure), the Examiner concludes that one of ordinary skill with Benitez would be motivated to seek out Kawhito; somehow modify Kawahito from eliminating redundant null pointer condition checks to eliminating null pointer condition checks as recited in Applicant's claims; and then refer to Schilling's general disclosure of exception handling to suddenly arrive at Applicant's claims. **The only motivation proffered by the Examiner is Benitez's general statement that hot blocks can be optimized.** There is no motivation or suggestion to modify Kawahito as done by the Examiner. The general desire to optimize a hot block as disclosed in Benitez, is not specific evidence of a motivation or suggestion to modify Benitez to identify null pointer condition checks that infrequently encounter null pointer conditions and then combine the modified Benitez with a modified Kawahito. **The Examiner's obviousness analysis lacks any showing of specific evidence of a suggestion or motivation to modify and combine the references as done by the Examiner.** The Examiner has failed to conduct an obviousness analysis without the assistance of Applicant's disclosure.

The Examiner has failed to establish a prima facie case of obviousness and has performed an improper obviousness analysis with the assistance of Applicant's disclosure. Applicant respectfully requests withdrawal of the rejections. None of the references, standing alone or in combination, disclose or suggest any of Applicant's claims, including the dependent claims.
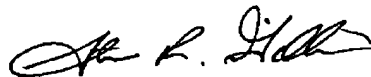
Conclusion

In summary, claims 1-8 and 33-48 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

response to 051116 foa   Application No.: 10/044,731

PATENT

<table>
<tr><td>

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that, on the date shown below, this correspondence is being

☐ deposited with the US Postal Service with sufficient postage as first class mail and addressed as shown above.

☒ facsimile transmitted to the US Patent and Trademark Office.

Steven R. Gilliam   _16-Jan-2006_
  Steven R. Gilliam   Date

</td></tr>
</table>

EXPRESS MAIL LABEL: _____

Respectfully submitted,

Steven R. Gilliam, Reg. No. 51,734
Attorney for Applicant(s)
(512) 338-6320 (direct)
(512) 338-6300 (main)
(512) 338-6301 (fax)

- 10 -

response to 051116 foa   Application No.: 10/044,731

PAGE 13/13 * RCVD AT 1/16/2006 4:48:07 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:512 338 6301 * DURATION (mm-ss):04-20